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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,556	11/05/2003	Yu-Chih Liu	0941-0862P	1051
2292	7590	02/14/2007	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			GOMA, TAWFIK A	
			ART UNIT	PAPER NUMBER
			2627	
SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE		DELIVERY MODE	
3 MONTHS	02/14/2007		ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)
	10/700,556	LIU, YU-CHIH
	Examiner	Art Unit
	Tawfik Goma	2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12/04/06
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 8-13 is/are allowed.
- 6) Claim(s) 1-2, 4-7 is/are rejected.
- 7) Claim(s) 3 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed on 12/28/2006.

Drawings

The drawings were received on 12/04/2006. These drawings are accepted and entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 recites the limitation "the threshold value" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Hiroyuki (JP 2003-281806).

Regarding claim 1, Hiroyuki discloses a method of opening/closing a disk tray in a disk drive (par. 14 and abstract) including the steps of: when opening or closing operation of the disk tray is requested, sending a first load/unload command to the disk drive to trigger an operation of opening or closing the disk tray (par. 14) and recording a time value that corresponds to a time point of sending the first command (par. 18); receiving a value returned by the disk drive for the first load/unload command and recording a time value that corresponds to a time point of

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receiving the returned value (par. 16 and par. 19); and calculating a period of time from the sending of the first load/unload command to the receiving of the returned value (par. 19).

Regarding claim 2, Hiroyuki further disclose wherein the opening or closing of the disk tray is requested utilizing an input device (113, drawing 1).

Regarding claim 4, Hiroyuki further discloses wherein when the calculated period of time is greater than a threshold period, the first load/unload command is executed by the disk drive to be completed (pars. 19 and 24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Hiroyuki (JP 2003-281806) in view of Applicant's Admitted Prior Art (AAPA).

Regarding claim 5, Hiroyuki fails to disclose wherein the load/unload command is defined by the ATAPI CD-ROM specification SFF-8020. AAPA discloses using a command defined by the SFF-8020 standard (par. 4). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use the SFF-820 standard in order to provide a simple and inexpensive interface (par. 4).

Claim 6 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Hiroyuki (JP 2003-281806) in view of Boss et al (US 6157618).

Regarding claim 6, Hiroyuki fails to disclose wherein wherein the time value that corresponds to a time point are retrieved via a Windows function GetTickCount(). In the same field of endeavor, Boss discloses using a GetTickCount() windows function as a timer (col. 7 lines 7-14). It would have been obvious to one of ordinary skill in the art to provide the function in order to have the method be windows compatible.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroyuki (JP 2003-281806).

Regarding claim 7, Hiroyuki fails to disclose wherein the threshold is about 0.5 seconds. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a threshold of 0.5 seconds. The rationale is as follows: to accommodate for different drive characteristics of ejecting motors in the course of optimization/experimentation a threshold of 0.5 seconds would be applied. Moreover, absent a showing of criticality, i.e., unobvious or unexpected results, the relationships set forth in claim 11 is considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range(s); see *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions; see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8-13 are allowed.

The following is an examiner's statement for reasons for allowance. Claim 3 is allowable and claims 8-13 are allowed because the prior art of record including closes JP Publication Hiroyuki (JP 2003281806) and Oh (US 6515951) considered individually or in combination fail to disclose or fairly teach a method of opening/closing a disk tray as claimed including the combination wherein a second unload/load command is sent to reverse the operation triggered by a first load/unload command when a period of time between when the first command was issued and a returned value was received is less than a threshold value.

Response to Arguments

Applicant's arguments with respect to claims 1-2, and 4-7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



T. Goma
2/6/2007



THANG V. TRAN
PRIMARY EXAMINER